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ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR CONFIRMATION NO. 10/30/2003 10/695,832 Ryouichi Ootsu 501.43231X00 7188 20457 7590 08/09/2006 **EXAMINER** ANTONELLI, TERRY, STOUT & KRAUS, LLP NGUYEN, JENNIFER T 1300 NORTH SEVENTEENTH STREET PAPER NUMBER ART UNIT **SUITE 1800** ARLINGTON, VA 22209-3873 2629

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/695,832	OOTSU ET AL.
	Examiner	Art Unit
	Jennifer T. Nguyen	2629
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
<ol> <li>Responsive to communication(s) filed on 30 Oc</li> <li>This action is FINAL.</li> <li>Since this application is in condition for allowant closed in accordance with the practice under E</li> </ol>	action is non-final.  nce except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-11 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5) Claim(s) is/are allowed.  6) Claim(s) 1-11 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or  Application Papers  9) The specification is objected to by the Examiner  10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction	vn from consideration.  relection requirement.  r.  epted or b) objected to by the ladrawing(s) be held in abeyance. See	e 37 CFR 1.85(a).
11) The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)    Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		
Paper No(s)/Mail Date	6) 🔲 Other:	

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa (Patent No. US 6,680,759).

Regarding claim 1, Ogawa teaches an image display device is characterized in that a first signal line group constituted of a plurality of first signal lines (51a1, fig. 2) which are arranged in parallel and a second signal line group constituted of a plurality of second signal lines (51a2, fig. 2) which are arranged in parallel in a region adjacent to the group of first signal lines are formed on a substrate (11), and

a dummy line (5a) is arranged between the first signal line group and the second signal line group (col. 9, lines 9-30).

Regarding claim 2, Ogawa teaches both ends of the dummy line are not connected to other signal lines (fig. 2).

Regarding claim 3, Ogawa teaches the dummy line (5, fig. 11) has one portion thereof connected to the second signal line which is arranged adjacent to the dummy line (fig. 11).

Regarding claim 4, Ogawa teaches the dummy line is constituted of a plurality of lines which are arranged in parallel (fig. 8).

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3. Claims 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Kang (Patent No. US 6,621,547).

Regarding claim 5, Kang teaches an image display device (fig. 4) is characterized in that a drive circuit (310) which supplies signals to respective pixels in an image display part of a substrate through signal lines is formed outside the image display part (col. 5, line 15 to col. 6, line 9,),

the drive circuit is constituted of a plurality of semiconductor devices (320), and the respective semiconductor devices are configured such that data are supplied between these respective semiconductor devices and other semiconductor devices (330) which are arranged adjacent to these respective semiconductor devices through data transfer signal lines (313), and a dummy line (355a) is formed between the signal lines (i.e., data lines) and the data

transfer signal lines (i.e., signal transmitting line) (col. 6, line 40 to col. 7, line 3).

Regarding claim 6, Kang teaches the signal lines are drain signal lines which supply video signals to respective pixels, and the drive circuit constitutes a video signal drive circuit (fig. 4).

4. Claims 5-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuwashiro (Patent No. US 5,945,984).

Regarding claim 5, Kuwashiro teaches an image display device (fig. 1) is characterized in that a drive circuit (801, 701) which supplies signals to respective pixels in an image display part of a substrate through signal lines is formed outside the image display part (2) (col. 5, lines 18-36),

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the drive circuit is constituted of a plurality of semiconductor devices (601-1 to 601-8, fig. 3), and the respective semiconductor devices are configured such that data are supplied between these respective semiconductor devices (601-1) and other semiconductor devices (601-2) which are arranged adjacent to these respective semiconductor devices through data transfer signal lines (783), and

a dummy line (731-1) is formed between the signal lines (i.e., data input terminal 641) and the data transfer signal lines (783) (col. 6, line 36 to col. 7, line 10).

Regarding claim 6, Kuwashiro teaches the signal lines are drain signal lines which supply video signals to respective pixels, and the drive circuit constitutes a video signal drive circuit (fig. 3).

Regarding claim 7, Kuwashiro teaches the signal lines are gate signal lines which supply scanning signals to respective pixels, and the drive circuit constitutes a scanning signal drive circuit (col. 2, lines 46-59).

Regarding claim 8, Kuwashiro teaches the signal lines which are arranged adjacent to each other are formed into groups (601-1 to 601-8), the signal lines which are formed into each group are directed in the converging direction outside the image display part and are connected to the respective semiconductor devices (fig. 1), and data transfer signal lines (783, fig. 3) which connect between one semiconductor device (601-1) and another semiconductor device (601-2) arranged adjacent to the one semiconductor device are formed such that the data transfer signal lines (783) loop around area at the image display part side between these respective semiconductor devices (fig. 3).

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Regarding claim 9, Kuwashiro teaches the dummy lines (731-1) are connected with the signal lines (641) which are arranged adjacent to the dummy lines (fig. 3).

5. Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by Moon et al. (Patent No. US 6,864,937).

Regarding claim 11, Moon teaches an image display device is characterized in that a pair of electrodes are formed on each pixel within an image display part of a substrate, one of the pair of electrodes includes a counter electrode (122, fig. 6) to which a counter voltage supply signal which becomes a reference with respect to signals supplied to another electrode of the pair of electrodes is supplied (col. 5, lines 18-35),

a drive circuit which supplies signals to the respective pixels through signal lines is formed outside the pixel display part, the drive circuit is constituted of a plurality of semiconductor devices (124), a counter voltage (122) supply signal line which supplies counter voltage supply signals to the counter electrode is formed on a region between one semiconductor device and another semiconductor device which is arranged adjacent to the one semiconductor device, and

a dummy line (136) is arranged between the signal lines (134) and the counter voltage supply signal line (128B) (col. 5, lines 37-67).

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwashiro (Patent No. US 5,945,984) in view of Ogawa (Patent No. US 6,680,759).

Regarding claim 10, Kuwashiro differs from claim 10 in that he does not specifically teach the connection between the dummy lines and the signal lines are established at the image display part side.

Ogawa teaches a connection (8a) between the dummy lines (5a) and the signal lines (51a2) are established at the image display part side (substrate 11) (col. 11, lines 4-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the connection as taught by Ogawa in the system of Kuwashiro in order to obtain a display panel having uniform electrical characteristics.

8. The prior art made of record and not relied upon is considered to pertinent applicant's disclosure: US 6,172,732; US 6,822,719.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Nguyen 8/3/06

richard'hjerpe

SUPERVISORY PATENT EXAMINER